

REMARKS/ARGUMENTS

These remarks are responsive to the Office Action dated June 1, 2006. Currently claims 1-14 are pending with claims 1, 4, and 12-14 being independent. Claims 1-3 are allowed.

In the June 1, 2006 Office Action, the Examiner advised the Applicants of the obligation under 37 C.F.R. 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made. The Applicants hereby state that the subject matter recited in the pending claims 1-14 was commonly owned at the time of the invention.

In the June 1, 2006 Office Action, the Examiner rejected claims 4 and 13-14 under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,324,661 to Gerbault et al. ("Gerbault"). This rejection is respectfully traversed.

In the June 1, 2006 Office Action, the Examiner rejected claim 11 under 35 U.S.C. 103(a) as being unpatentable over Gerbault as applied to claim 4 above and further in view of U.S. Patent No. 6,272,536 to van Hoff et al ("Hoff"). This rejection is respectfully traversed.

In the June 1, 2006 Office Action, the Examiner objected to claims 5-10 as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Applicants gratefully acknowledge allowance of claims 1-3.

35 U.S.C. 103(a)

In the June 1, 2006 Office Action, the Examiner rejected claim 4 under 35 U.S.C. 103(a) as being anticipated by Gerbault. This rejection is respectfully traversed.

In the June 1, 2006 Office Action, the Examiner stated that Gerbault discloses all elements of claim 1 except it does not disclose recovering copy of the file from another

repository node. (Office Action, page 3). The Examiner further stated that “it would have been obvious to a person of ordinary skill in the computer testing art, at the time the invention was made, to interchange or replace the erroneous portion with a copy of another non-erroneous portion of another repository node as needed if desired so that error can be corrected.” (Office Action, page 4). The Applicants respectfully disagree.

Claim 4 recites, *inter alia*, a method for managing integrity of a file, the method that includes performing a content checksum of a file in a repository node to obtain a checksum and storing the checksum in the repository node; subsequently performing the content checksum on the file to obtain another checksum and comparing the another checksum with the checksum; and if the comparison fails to indicate that the checksums are the same, recovering a copy of the file from another repository node.

Gerbault describes a method for managing data integrity faults in a re-writeable memory. The method performs a check on the integrity of at least some of the main data. If a defect is revealed, the method allocates at least one default value to at least one item of a secondary data, thereby requiring performance of an on-line interchange. (See, Abstract, and Col. 4, lines 43-48). Thus, Gerbault discloses performing checks (or checksums) on two sets of data -- main data and secondary data. This is in contrast to the recitation of claim 4, where first and second checksums are performed on the same file. As such, Gerbault fails to teach performing a content checksum of a file in a repository node to obtain a checksum and storing the checksum in the repository node and subsequently performing the content checksum on the file to obtain another checksum, as recited in claim 4.

Gerbault also fails to disclose, teach or suggest if the comparison of the checksums fails to indicate that the checksums are the same, then recovering a copy of the file from another repository node, as recited in claim 4.

Gerbault teaches revealing integrity faults concerning either main data or secondary data based on the checksums performed for the respective data. (Col. 4, lines 38-47). This is contrary to the present invention, where the checksums are performed on the same file and then compared to each other, as recited in claim 4. Thus, Gerbault does not deal with the same file and computation of two checksums for the same file. Instead, it deals with two separate sets of data and performing two separate checksums for each set of data, which is contrary to the recitation of claim 4.

Further, Gerbault only assigns a default value to the data based on the negative comparison that reveals an integrity fault of the secondary data only. Based on that, Gerbault requires an on-line interchange. (Col. 4, lines 43-47). Gerbault does not recover any copies of data from another repository node. This is different from recovering a copy of the file from another repository node, as recited in claim 4. Thus, Gerbault does not describe every element of claim 4, and claim 4 should be allowed.

Gerbault also discusses performing “an online interchange” after some default value has been assigned to the secondary data based on a negative comparison. (Col. 4, lines 43-47). Gerbault does not specify what is being interchanged. Gerbault’s FIGS. 1 and 2 illustrate performing a separate checksum for each separate set of data (main data and secondary data). (FIGS. 1 and 2). Based on such performing, the processes are either halted, continued or a default value is assigned to secondary data. However, nothing else happens after either of the first two occurrences, but in the third occurrence an online interchange is performed. But,

Gerbault does not specify if the main data is to be interchanged with the secondary data or any other data, nor where the data is to be recovered from. To the contrary, the present invention performs two checksums for the same file, then compares the checksums, and if the comparison fails to indicate that the checksums are the same, recovers a copy of that same file from another repository node, as recited in claim 4. Thus, contrary to the Examiner's suggestion, it not proper to compare interchange performed in Gerbault with recovering a copy of the file from another repository node, as recited in claim 4.

Thus, this rejection is respectfully traversed. The Examiner is requested to reconsider and withdraw his rejection of claim 4.

The invention recited in the claims of the present application also provides for a better way to maintain accuracy of data. This is accomplished by storing the same data in multiple repositories and continuously checking it to ensure that there are no errors. The data on a single repository is periodically checked for accuracy by performing checksums on the same data at various times. To ensure accuracy of the data, the checksums that are performed on the same file within the same repository are also compared to each other. If the comparison reveals a problem, then files can be recovered from other repositories. The art cited by the Examiner lacks this ability. The art discloses a main data file and a secondary or a card (e.g., an ATM card) data file. The data on the card cannot be checked until a user inserts the card into a reader device. Only when the card is inserted, the data on the card is compared to the main data using appropriate checksums. However, the user having the card has no way of knowing that his card may contain bad data until the user attempts to use the card. Such bad card data, for example, may prevent the user from accessing an ATM machine. The present invention solves this problem by

continuously checking files within the same repository and replacing them based on checksum comparisons.

Claims 13 and 14 are not rendered obvious by Gerbault for at least the reasons stated above with respect to claim 4. As such, the rejection of claims 13 and 14 is respectfully traversed. The Examiner is requested to reconsider and withdraw his rejection of claims 13 and 14.

Claim 11 is dependent on claim 4. As such, it is patentable over Gerbault for at least the reasons stated above with respect to claim 4. Hoff does not cure deficiencies of Gerbault. Hoff does not disclose, teach or suggest performing a content checksum of a file in a repository node to obtain a checksum and storing the checksum in the repository node; subsequently performing the content checksum on the file to obtain another checksum and comparing the another checksum with the checksum; and if the comparison fails to indicate that the checksums are the same, recovering a copy of the file from another repository node. Thus, the rejection of claim 11 is respectfully traversed. The Examiner is requested to reconsider and withdraw his rejection of claim 11.

Claims 5-10 are dependent on claim 4. As such, claims 5-10 are patentable over Gerbault for at least the reasons stated above with respect to claim 4. Thus, the Examiner is respectfully requested to reconsider and withdraw his objection of claims 5-10.

No new matter has been added.

The claims currently presented are proper and definite. Allowance is accordingly in order and respectfully requested. However, should the Examiner deem that further clarification of the record is in order, we invite a telephone call to the Applicants' undersigned attorney to expedite further processing of the application to allowance.

Respectfully submitted,



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